

APPLICATIONS

- > Contactless sensor
- > High accuracy closed loop control
- > High accuracy displacement monitoring

KEY FEATURES

- > Output: ± 10 V voltage
- > Eddy current sensing technology
- > Typical linearity 0.1% of full scale
- > Low temperature drift coefficient
- > 20 kHz bandwidth
- > Up to 3 channels on a single board
- > Fully compatible with CTEC Eddy Current Probes and Powered Racks

RELATED PRODUCT

- > CTEC Eddy current Probes (ECP)



SPECIFICATIONS

> Preliminary data

PARAMETER	TYPICAL VALUE	UNIT
Number of channels	1 ... 3	

> Input

Sensor type	CTEC Eddy Current Probes	
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> Electrical characteristics

Power Supply	24	Vdc
Excitation frequency	> 500	kHz

> Output

Typical output voltage ⁽¹⁾	± 10	V
Output peak current	± 50	mA
Output impedance	100	Ω
DC offset span	± 10	V
Minimum output load	600	Ω
Bandwidth - 3 dB (extended on request)	20	kHz

> Typical achieved accuracy

Resolution (BW = 20 kHz) ^{(2) (3)}	0.010	% FS
Resolution (BW = 1 kHz) ^{(2) (3)}	0.003	% FS
Resolution (BW = 20 kHz), extended range ^{(2) (3)}	0.014	% FS
Resolution (BW = 1 kHz), extended range ^{(2) (3)}	0.005	% FS
Linearity ⁽⁴⁾	0.1	% FS
Thermal drift ⁽⁵⁾	<0.05	% FS/°C

ANNOTATIONS

- (1) Set to [-1 V ; 7.5 V] on CTEC systems to be consistent with driver input - Could be adjusted with customer specification
- (2) BW : Bandwidth
- (3) FS : Full Scale
- (4) Better linearity can be achieved on request
- (5) Due to temperature change on the probe

MISCELLANEOUS

PARAMETER	TYPICAL VALUE	UNIT
Operating temperature range	0 ... 40	°C
Storage temperature range	-10 ... 50	°C

INTERFACES

Output connector:	BNC type	
Input sensor connector	LEMO EGG.00.304.CLL	
DC Offset	10-turn screw potentiometer	
Synchronisation for multi probes/ conditionners	SMC 50 Ohms type	
Indicators	Front panel leds for range indication	

OPTIONS

Differential output (with two probes)

